

## **REMARKS**

In the Office Action mailed December 12, 2007, the Examiner noted that claims 1-9 were pending, that claim 9 has been withdrawn from consideration, and rejected claims 1-8. Claim 1 has been amended, no claims have been canceled, new claim 10 has been added; and, thus, in view of the foregoing claims 1-8 and 10 remain pending for reconsideration which is requested. No new matter is believed to have been added. The Examiner's rejections are respectfully traversed below.

### **Interview Summary**

The undersigned wishes to thank the Examiner for conducting the Interview on March 6, 2008. The following discussion is based on the Interview of March 6, 2008.

### **Rejections under 35 U.S.C. § 103**

In item 7 on page 3 of the Office Action, claims 1, 2 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kulakowski et al. (USPN 6,731,455, hereinafter "Kulakowski") in view of Hanaoka et al. (USPN 6,144,519, hereinafter "Hanaoka").

Kulakowski is related to an automated library system that includes a gripper assembly for interfacing with a storage device (see Kulakowski, Abstract). Particularly, Kulakowski describes that data communication is enabled between the gripper assembly and the storage device (e.g. Hard Disk Drive) data interfaces when the gripper assembly is engaged with the Hard Disk Drive. The Office Action, on page 3, asserted that col. 4, line 45 – col. 5, line 20 discloses the feature of "media drives in which the cartridges are removably mounted and which access the storage medium contained in the cartridges" as recited in claim 1. However, this assertion is respectfully traversed with an argument.

As indicated at the Interview, the Hard Disk Drive described in Kulakowski does not constitute media drives as recited in claim 1 because the Hard Disk Drive does not include "cartridges that are removably mounted" and nor can the Hard Disk Drive "access the storage medium contained in the [removable] cartridges" as required by claim 1. Further, the gripper or the library backplane described in Kulakowski accesses the Hard Disk Drive, whereas in claim 1 the "media drives ... access the storage medium contained in the cartridges".

Therefore, Kulakowski is silent as to "media devices in which the cartridges are removably mounted and which access the storage medium contained in the cartridges". This silence is not surprising because Kulakowski is directed to accessing Hard Disk Drives with the

use of a gripper rather being directed to "media drives in which cartridges are removably mounted" as recited in claim 1.

Thus, the cited reference fails to teach or suggest the above-mentioned feature recited in claim 1.

Further, claim 1, as amended, recites "wherein the backup control information is transferred to the first memory of the control board from the diagnostic cartridge when the control board is replaced", (claim 1, lines 17-18), which is supported by the embodiment of the invention on the last 4 lines of page 17 to the first 2 lines of page 18 of the Application.

By at least the above-mentioned feature recited in claim 1, when a control board is replaced backup control information is transferred to the first memory of the control board from the diagnostic cartridge. As a result, control information of the library device is quickly restored to working order.

Kulakowski does not teach or suggest at least the above-mentioned features as recited in claim 1 because Kulakowski is merely concerned with reducing the time for communicating data in a tape library by engaging the gripper to the Hard Disk Drive data interface to enable data communications (see Kulakowski, Abstract, col. 1, lines 45-55) rather than "[transferring] backup control information ... to the first memory of the control board from the diagnostic cartridge when the control board is replaced" as recited in claim 1.

Hanaoka is related to a library apparatus with a plurality of accessors that discriminate ordinary cartridges from cleaning cartridges (see Hanaoka, Abstract). According to Hanaoka, location information of a disk is compared with the information stored in the memory (see Hanaoka, col. 2, lines 46-48). If the information does not match, then the accessor performs a measurement to obtain the correct location information of the disk (see Hanaoka, col. 2, lines 49-51). As a result, cleaning disks and ordinary disks are distinguished by location information.

However, Hanaoka fails to teach or suggest the above-mentioned features recited in claim 1 because Hanaoka is merely concerned with obtaining the correct location information of a disk to discriminate between cleaning disks and ordinary disks rather than "[transferring] the backup control information ... to the first memory of the control board from the diagnostic cartridge when the control board is replaced" as recited in claim 1.

Therefore, in view of the foregoing, neither reference, taken alone or in combination, teaches or suggests the above-mentioned features recited in claim 1. Thus, claim 1 is patentable over the cited references, taken alone or in combination.

The dependent claims 2 and 5 are patentable over the cited references for at least the same reasons as base claim 1. Further, claim 2 is additionally patentable for the following reasons.

Claim 2 recites "upon power-up, the control board judges *whether the ID information* stored in the first memory *represents the library device*, and if the *ID information ... does not represent the library device*, the robot takes the diagnostic cartridge out of the cell array, reads the backup information out of the second memory installed in the diagnostic cartridge, and sends the backup information to the control board, and the control board writes the backup information received from the robot into the first memory".

As indicated at the Interview, Hanaoka fails to teach or suggest the above-mentioned features recited in claim 1 because Hanaoka is merely concerned with determining the location information of a disk to discriminate between a regular disk and a cleaning disk (see Hanaoka, Abstract and col. 2, lines 46-52). Further, according to Hanaoka, a measurement to determine the location of the disk can be performed without using an accessor (see Hanaoka, col. 26, lines 47-48). According to Hanaoka, location information of the disk is determined by selecting the values contained in the table stored in the floppy disk (see Hanaoka, col. 26, lines 49-53). As a result, location information is obtained to distinguish between the regular disks and cleaning disks.

In claim 2, however, "the control board judges whether ***ID information ... represents the library device***, and if the ***ID information ... does not represent the library device***, the robot ... sends the backup information to the control board, and the control board writes the backup information received from the robot into the first memory". Hanaoka does not teach or suggest the above-mentioned features recited in claim 2 because Hanaoka is merely concerned with determining the location information of a disk rather than determining whether "***ID information ... represents the library device***" as recited in claim 2. Therefore, location information described in Hanaoka is not the same as ID information as recited in claim 2.

Further, Kulakowski fails to teach or suggest the above-mentioned features because Kulakowski is merely concerned with data communications between a gripper and the Hard Disk Drive rather than judges "whether ***ID information ... represents the library device***" as recited in claim 2.

Therefore, in view of the foregoing, claim 2 is patentable over the cited references, taken alone or in combination.

In item 8 on page 5 of the Office Action, claims 3, 4 and 6-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kulakowski in view of Hanaoka and further in view of Utsumi et al. (USPN 5,967,339).

Utsumi is directed to reduce the size of a library apparatus by installing relative flags using cells of a storage rack to suppress the increase in the installation area or volume of a locker resulting from the installation of the relative flags (see Utsumi, Abstract). However, nothing was found or cited in Utsumi that teaches or suggests, for example, "[transferring] the backup control information ... to the first memory of the control board from the diagnostic cartridge when the control board is replaced" as recited in claim 1. Therefore, Utsumi fails to cure the deficiencies of Kulakowski and Hanaoka as set forth above with respect to claim 1. Therefore, in view of the foregoing, claims 3, 4 and 6-8 are patentable over the cited references for at least the same reasons as base claim 1.

Accordingly, withdrawal of the rejections is respectfully requested.

#### **New Claim**

Claim 10 is new and is supported by the last 4 lines of page 17 to the first 2 lines of page 18 of the Application. New claim 10 has been added to emphasize "the backup control information is transferred to the control board from the diagnostic cartridge when the control information in the control board needs to be restored", which is not taught or suggested by the cited references. It is submitted that new claim 10, which is different and not narrower than the prior filed claims, patentably distinguish over the cited references.

#### **Summary**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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